Having thus described the invention, it is so claimed:

1. A wrench for gripping any one of a plurality of cylindrical workpieces having different diameters comprising, a handle having longitudinally opposite ends, a fixed jaw on one of said ends, said fixed jaw comprising a plurality of teeth laterally therealong and facing longitudinally outwardly of said one end, said teeth including a plurality of discrete teeth, each discrete tooth being for a different one of a plurality of cylindrical workpieces having different diameters, a pivotal jaw member having first and second jaw faces at an angle to one another and each including a plurality of teeth facing inwardly of said one end, said pivotal jaw member being mounted on said one end for displacement of said first and second jaw surfaces about a jaw axis toward and away from said fixed jaw, a workpiece of given diameter to be gripped by the wrench being cradled between said first and second jaw faces and engaged by the one of said plurality of discrete teeth provided on said fixed jaw for the workpiece of given diameter.

2. A wrench according to claim 1, wherein each of said discrete teeth has an apex and the apex of each discrete tooth is angularly offset from the apex of the preceding discrete tooth relative to said jaw axis by an angle R which is determined by the formula $R=TR \times \frac{D1-D2}{D3-D2}$ wherein TR is the total rotation of the pivoted jaw member about the jaw axis relative to the fixed jaw, D1 is the outer diameter of the workpiece succeeding the workpiece corresponding to the preceding discrete tooth, D2 is the outer diameter of the smallest of the plurality of workpieces to be gripped, and D3 is the outer diameter of the largest of the plurality of workpieces to be gripped.

3. A wrench according to claim 2, wherein, with the workpiece of given diameter gripped by the wrench, a line through said jaw axis and the apex of the one discrete tooth for the workpiece of given diameter and a line through the vertex of said first and second jaw faces and said apex of said one discrete tooth intersect to provide a camming angle therebetween of from 90° to 150°.

4. A wrench according to claim 1, wherein said plurality of teeth laterally along said fixed jaw includes teeth laterally between adjacent ones of said discrete teeth.

5. A wrench according to claim 1, wherein the one of said discrete teeth has an included angle of 55°, a relief angle of 25° and a rake angle of 10° relative to a line through the apex of the one discrete tooth and the center of the workpiece of given diameter.

6. A wrench according to claim 1, wherein the one of said discrete teeth has an included angle of 90°, a relief angle of 40° and a rake angle of -40° relative to a line through the apex of the one discrete tooth and the center of the workpiece of given diameter.

7. A wrench according to claim 1, wherein each of said discrete teeth has an apex and said pivotal jaw member has a vertex between said first and second jaw faces and wherein, with the workpiece of given diameter gripped by the wrench, a line through said jaw axis and the apex of the one discrete tooth for the workpiece of given diameter and a line through said vertex and said apex of the one discrete tooth intersect to provide a camming angle therebetween of from 90° to 150°.

8. A wrench according to claim 7, wherein the discrete teeth corresponding to a camming angle of from 90° to 130° have an included angle of 55°, a relief angle of 25° and a rake angle of 10° relative to a line through the apex of each corresponding discrete tooth and the center of the workpiece of given diameter for the corresponding tooth.

9. A wrench according to claim 8, wherein each of said discrete teeth has an apex and the apex of each discrete tooth is angularly offset from the apex of the preceding discrete tooth relative to said jaw axis by an angle R which is determined by the formula $R=TR \times \frac{D1-D2}{D3-D2}$ wherein TR is the total rotation of the pivotal jaw member about the jaw axis relative to the arcuate jaw, D1 is the outer diameter of the workpiece succeeding the pipe corresponding to the preceding discrete tooth, D2 is the outer diameter of the smallest of the plurality of workpieces to be gripped, and D3 is the outer diameter of the largest of the plurality of workpieces to be gripped.

10. A wrench according to claim 7, wherein the discrete teeth corresponding to a camming angle of 131° to 150° have an included angle of 90°, a relief angle of 40° and a rake angle of -40° relative to a line through the apex of each corresponding discrete tooth and the center of the workpieces of given diameter for the corresponding tooth.

11. A wrench according to claim 10, wherein each of said discrete teeth has an apex and the apex of each discrete tooth is angularly offset from the apex of the preceding discrete tooth relative to said jaw axis by an angle R which is determined by the formula $R=TR \times \frac{D1-D2}{D3-D2}$ wherein TR is the total rotation of the pivotal jaw member about the jaw axis relative to the arcuate jaw, D1 is the outer diameter of the workpiece succeeding the pipe corresponding to the preceding discrete tooth, D2 is the outer diameter of the smallest of the plurality of workpieces to be gripped, and D3 is the outer diameter of the largest of the plurality of workpieces to be gripped.

12. A wrench according to claim 10, wherein the discrete teeth corresponding to a camming angle of from 90° to 130° have an included angle of 55°, a relief angle of 25° and a rake angle of 10° relative to a line through the apex of each corresponding discrete tooth and the center of the workpiece of given diameter for the corresponding tooth.

13. A wrench according to claim 12, wherein each of said discrete teeth has an apex and the apex of each discrete tooth is angularly offset from the apex of the preceding discrete tooth relative to said jaw axis by an angle R which is determined by the formula $R=TR \times \frac{D1-D2}{D3-D2}$ wherein TR is the total rotation of the jaw member about the jaw axis relative to the arcuate jaw, D1 is the outer diameter of the pipe succeeding the pipe corresponding to the preceding discrete tooth, D2 is the outer diameter of the smallest of the plurality of workpieces to be gripped, and D3 is the outer diameter of the largest of the plurality of workpieces to be gripped.

14. A wrench according to claim 13, wherein said plurality of teeth laterally along said fixed jaw includes teeth laterally between adjacent ones of said discrete teeth.

15. A wrench according to claim 7, wherein said plurality of teeth laterally along said fixed jaw includes teeth laterally between adjacent ones of said discrete teeth.

16. A wrench according to claim 1, wherein the angle between said first and second jaw faces is between 90° and 130°.

17. A wrench according to claim 16, wherein said angle is 119°.

18. A wrench according to claim 16, wherein each of said discrete teeth has an apex and said pivotal jaw member has a vertex between said first and second jaw faces and wherein, with the workpiece of given diameter gripped by the wrench, a line through said jaw axis and the apex of the one discrete tooth for the workpiece of given diameter and a line through said vertex and said apex of the one discrete tooth intersect to provide a camming angle therebetween of from 90° to 150°.

19. A wrench according to claim 18, wherein the discrete teeth corresponding to a camming angle of from 90° to 130° have an included angle of 55°, a relief angle of 25° and a rake angle of 10° relative to a line through the apex of each corresponding discrete tooth and the center of the workpiece of given diameter for the corresponding tooth.

20. A wrench according to claim 18, wherein the discrete teeth corresponding to a camming angle of 131° to 150° have an included angle of 90°, a relief angle of 40° and a rake angle of -40° relative to a line through the apex of each corresponding discrete tooth and the center of the workpiece of given diameter for the corresponding tooth.

21. A wrench according to claim 20, wherein the discrete teeth corresponding to a camming angle of from 90° to 130° have an included angle of 55°, a relief angle of 25° and a rake angle of 10° relative to a line through the apex of each corresponding discrete tooth and the center of the workpiece of given diameter for the corresponding tooth.

22. A wrench according to claim 21, wherein each of said discrete teeth has an apex and the apex of each discrete tooth is angularly offset from the apex of the preceding discrete tooth relative to said jaw axis by an angle R which is determined by the formula $R=TR \times \frac{D1-D2}{D3-D2}$ wherein TR is the total rotation of the pivotal jaw member about the jaw axis relative to the arcuate jaw, D1 is the outer diameter of the workpiece succeeding the workpiece corresponding to the preceding discrete tooth, D2 is the outer diameter of the smallest of the plurality of workpieces to be gripped, and D3 is the outer diameter of the largest of the plurality of workpieces to be gripped.

23. A wrench according to claim 22, wherein said plurality of teeth laterally along said arcuate jaw includes teeth laterally between adjacent ones of said discrete teeth.

24. A wrench according to claim 22, wherein said angle is 119°.

25. A wrench according to claim 23, wherein said plurality of teeth laterally along said arcuate jaw includes teeth laterally between adjacent ones of said discrete teeth.